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ABSTRACT

A newly organized small college model for a decentralized institutional research office was described and evaluated. Using Hearn and Corcoran's six external or organizational forces (external environment, personalities or individual interests, management styles, power arrangements, microcomputing and telecommunications, and structural and procedural arrangements) a small private liberal arts college in the Southeastern United States adopted a 2-year comprehensive assessment model to measure the effectiveness of the educational program. Year One activities included seven research goals and eight procedural goals. Year Two activities involved assessment of Year One's goals and the establishment of more sophisticated Year Two goals. It appeared that two channels of activity contributed to the proliferation of institutional research activities of which the newly-organized research office was one. However, the needs of the institution were not completely met by this office and so it was found that department chairs and academic area directors offered an alternative and supporting channel of activity. The outcome showed that the research effort had moved in two years from a position of engaging in almost no centralized empirical study to one of widespread involvement. The paper offers 12 references and 1 table. (JB)

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Decentralized and Integrated Institutional Research:

A Contradiction in Terms that Works

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Decentralized and Integrated Institutional Research:
A Contradiction in Terms that Works

Abstract

Despite the view that institutional research is most successful when it is an extension of the administrators who needs its products, most institutional research offices are centralized. In this paper a newly-organized, small college model that is both decentralized and integrated is described. Evaluation of the model is reported. Goals and activities are related to recently identified external and organizational factors that seem to contribute to the proliferation of institutional research.

Decentralized and Integrated Institutional Research:

A Contradiction in Terms that Works

In describing a route to acceptance for institutional research, Haas (1980) observed that "because all administrators engage in institutional research, a new process for such activity has the highest chance of success if it becomes, at least initially, an extension of the current work of the administrators. This principle holds no matter what the size of the institution" (p. 540). Haas agreed with Saupe (1981) who described institutional research as "an essential ingredient. . . [that] should occur throughout the institution, wherever any sort of planning occurs, any type of policy issue is considered, and any decision about some aspect of the institution is proposed" (unpaginated).

Despite recommendations for campus-wide research efforts, the responsibility for institutional research usually rests with one office and, in some cases, with one person. Such a centralized model advantages. It allows costs, duplication of effort, threats to data privacy, and professional and clerical training to be reduced (Hearn & Corcoran, 1988). It also signals a response to scholars, practitioners, and accrediting agencies. Scholars and practitioners call for institutions to rely on professional researchers trained in data analysis and interpretation (Ridge, 1978). Accrediting agencies suggest or require that institutions assign responsibility for research to specific administrators (SACS, 1984).

Recently the centralized approach to institutional research seems to be changing (Hearn & Corcoran, 1988). Shifts in organizational design have resulted in a "more differentiated and complex reality: a wide range of offices are conducting institutional research for a wide range of purposes" (p. 634). This new pattern may reflect expanding needs for information in all campus offices and growing recognition of the power of gathering, analyzing, and sharing data. After investigating the growth of the institutional research function at a major university Hearn and Corcoran proposed a theoretical framework for the proliferation of research and described six general forces that seem to contribute to the decentralized model.

In this paper a newly established, decentralized approach to institutional research in a liberal arts college undergoing reaccreditation procedures for the Southern Association of Colleges and Schools

(SACS) is described in terms of Hearn and Corcoran's (1988) framework. The small college differs dramatically from the major university studied by Hearn and Corcoran. Even so, similar factors seem to influence the proliferation of research. The author discusses these factors in the context of the small college culture and the SACS requirement to demonstrate institutional effectiveness. She presents goals and activities for the first two years of work, describes the involvement of deans, academic department chairs, and academic area directors, and reports on their evaluation of the research function. Conclusions suggest a model that is both decentralized and integrated. The model seems to contribute to institutional effectiveness and to the involvement in management and planning of a broad base of administrative and academic personnel.

Background

As part of the Stanford Project on Academic Governance, Baldridge, Curtis, Ecker, and Riley (1978) investigated the ways in which colleges and universities make decisions and govern themselves.[1] Baldridge et al. identified similarities and differences in academic institutions and in other types of institutions. They also addressed similarities and differences among certain types of academic institutions. They found that "the organizational characteristics of academic institutions are so different from other institutions that traditional management theories do not apply to them" (p. 9). Additionally, colleges and universities differ from each other. Size and complexity appear to influence their decision-making processes and control the "institution's degree of centralization and the involvement of faculty and other groups in governance activities" (p. 10). Baldridge et al. described larger, more prestigious universities as institutions where administrative control is moderate. The influence of the external environment seems to be low. Private liberal arts colleges, on the other hand, usually experience high levels of administrative control. The external environment is a powerful influence. These observations led Baldridge et al. to conclude that administrators are less dominant and the environment has less influence on autonomy in larger, more prestigious universities than in smaller, liberal arts colleges. Overall they predicted that the influence of administrators on governance and the amount of data available to aid in the decision-making

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[1] The author appreciates the suggestion of Jim Hearn to investigate this piece of the literature.

process would increase over time.

Today, many institutions depend on data to support decision-making. The institutional research function supplies data on campuses of all sizes. Defined in 1960 (Brumbaugh), institutional research was in a critical stage of development by 1985. As declining enrollments and financial constraints caused resource reduction, the shape and practice of institutional research was altered. During the last half of the 1980s, many questioned the continued existence of institutional research as a separate function (Peterson, 1985). In the mid-1980s, however, a national movement toward outcomes assessment paved the way for new research opportunities. By 1990 eight out of ten colleges and universities were involved in assessment activities. This is not surprising since 84% of state governments, governing boards, and coordinating agencies in America support assessment initiatives (El-Khawas, 1990; Ewell, Finney, & Lenth, 1990).

The trend to demonstrate effectiveness offers new opportunities to institutional researchers. Those involved in assessment activities can use the assignment "to move past relatively routine reporting into what can be the more creative aspects of our profession" (Nichols, 1990, unpaginated). Forces driving assessment activities vary. Some colleges demonstrate effectiveness because they believe it is a sound educational practice; others do so to meet external requirements. Reasons for assessment are important to researchers. Often they determine the exact role of institutional research (Nichols, 1990).

The reason for involvement by institutions accredited by the Southern Association of Colleges and Schools (SACS) is clear. In 1984 SACS implemented Section III of the Criteria for Accreditation. Section III requires colleges and universities to define "expected educational results and describe how the achievement of these results will be ascertained" (p. 14). In other words, SACS-accredited institutions must demonstrate the effectiveness of their educational programs. Planning, evaluation activities, and implementation of improvements based on evaluation results must be components of the process and must be supported by organized institutional research.

Most research offices of SACS-accredited institutions are not equipped to absorb the considerable workload imposed by Section III of the SACS criteria. In 1990 Nichols and Wolff surveyed 190 members of the Southern Association for Institutional Research to determine the number of institutions undergoing

reaccreditation under Section III, whether or not the institutions received "satisfactory" ratings of effectiveness by reaccreditation committees, the current degree of implementation of effectiveness activities, and factors facilitating or impeding implementation. Thirty-six per cent (n = 46) of the 130 respondents have been evaluated under the effectiveness criteria; 72% (n = 33) of these received satisfactory ratings. It appears that inadequate financial and personnel resources contribute to unsatisfactory ratings. Where institutional commitment to effectiveness is low, institutional research efforts must be more substantial to achieve success on the criteria.

Perhaps new assessment criteria such as those implemented by SACS, as well as ever-growing requests for information from all levels of administration, contribute to the proliferation of institutional research activities in offices other than those charged with conducting internal research (Hearn & Corcoran, 1988). Regardless of the origin of data needs, traditional research functions are not being shifted to other units. Instead, an increasing number of "actors" (p. 635) on campuses engage in research.

Hearn and Corcoran (1988) pose two arguments for organizational conditions that can lead to the proliferation of research: the informational legitimacy argument and the limited attention argument. Research emerges from offices other than the institutional research office when central-office findings are not accepted as legitimate by the campus population and/or when central-office time and resources are insufficient to serve all significant needs. Hearn and Corcoran also suggest that external and internal factors lead to proliferation. External factors are demographic, social, and economic conditions. Internal factors are specific institutional characteristics.

In describing the nature of the proliferation of research, Hearn and Corcoran (1988) offer six external or organizational forces that seem to be at work. They are:

1. The external environment or influential political, economic, legal, and demographic factors. Units of the college or university that face ongoing interaction with outside agencies for whom they need research are likely to conduct their own studies.

2. Personalities, career paths, or individual interests can shape the spread of research. Specifically, when institutional researchers assume new positions within organizations, they

often continue to seek empirical answers to questions.

3. Management styles can shape the approach to research. Presidents and deans who request objective data before making decisions can define the research function.

4. Power arrangements combined with resource shortages can be important contributors. In the face of threatening demographics, many presidents and deans may increase their interest in data as offensive or defensive moves.

5. Microcomputing and telecommunications make it possible for more and better information to lead to informed decision making. Analyses formerly out of reach for small colleges are affordable and available.

6. Structural and procedural arrangements within institutions sometimes require that research offices standardize data for use across campuses. Varied calendars and accounting procedures within an institution are examples of such arrangements (Adapted from Hearn and Corcoran, 1988, pp. 643-645).

In their study of the proliferation of research at a major university, Hearn and Corcoran (1988) concluded that increased research activity may "be a sign of spreading symbolic entrance into debates over goals and resources as well as a sign of a widening and better-informed dialogue over substantive institutional issues" (p. 647). The leadership styles of key staff in the unit and of the president or dean of the institution can contribute to proliferation. While some aspects of proliferation can be negative, benefits are likely. Organizational efficiency and effectiveness increases as more people become sources and controllers of information. As information becomes a shared product, an open and participative model of management seems to evolve.

Small College Case Study:

A Decentralized and Integrated Model

While Hearn and Corcoran (1988) investigated one large, public university, their findings seem to be applicable to other types of institutions. Small college planning is similar in some ways to university planning. In other ways it is different. In small colleges fewer layers of people share a greater sense of

responsibility for the outcomes of planning (Baldridge & Tierney, 1979). Most participants assume planning duties in addition to a myriad of other assignments. They are eager consumers of research. Indeed, a shared planning mission, SACS requirements to demonstrate effectiveness and organized institutional research, and a number of Hearn and Corcoran's (1988) forces appear to contribute to institutional research as it has been evolving for the past two years at the small college under discussion.

Design of the Study

The college is a private institution in the Southeast offering undergraduate and graduate degrees in liberal arts and professional areas. Historically a women's college, it enrolls approximately 2000 students in day, evening, and weekend formats. The women's college is managed as a discrete division of the larger institution but institution-wide planning is in place. The academic vice president administers the academic program and chairs the planning effort. She encourages participative management by meeting at least monthly with department heads and academic area directors (i.e., the library director, institutional research director, and assessment director) to discuss issues and make decisions. Three years ago the college adopted a comprehensive assessment model to measure the effectiveness of the educational program. During Year One of this study the assessment model was in the final planning year and the institutional research office was in its first year of operation. Other primary issues before this group during the time of the study were declining enrollment numbers, shrinking budgets, and reaccreditation procedures.

Year One Activities

The institutional research office began operation in the fall of Year One. It is staffed by a one-third time director who teaches two classes per quarter and has been a member of the faculty for seven years, and a half-time student assistant. Under the direction of the newly-appointed academic vice president, the director established the following institutional research goals for Year One (the 1989-1990 academic year):

1. to identify the research topics most necessary for sound decision-making by the executive and academic staff. These include identifying the necessary data elements and developing an effective format for communicating with various college constituencies.

2. to discover, in the absence of a central computing facility, a method for securing accurately-edited data.

3. to increase the investment of research users in accuracy and relevance.

4. to present the data in a series of research reports and share these with appropriate members of the college community.

5. to become a depository for information supporting the reports.

6. to produce the college's first fact book.

7. to support the SACS self-study.

In order for one professional person who devotes one-third time to the duties of director to attain these goals, procedures encouraging shared responsibility for accurate data are essential. Accordingly, the academic vice president and the director established a process for identifying appropriate areas of research, gathering data, and producing research reports that included the following steps:

1. The academic vice president and the director identify topics most needed by the administrative and academic staff for sound decision making.

2. The director plans reports to address the topics, lists necessary data elements, and designs a format to organize the elements in each table. The final product of this step, a spread-sheet form, simplifies data collection. Forms can be modified for tables in follow-up reports.

3. Considering the limited resources of the research office and the history of participative management at the college, the vice president and the director requested that the administrative staff, department chairs, and academic area directors supply data for the tables. Administrators who represent pertinent areas receive blank copies of the spreadsheet forms.

4. The administrators complete appropriate portions of the spreadsheets and return them to the research office. These calls for data are in the form of requests, with offers of assistance from the research office. The director suggests dates for data to be returned

and makes follow-up calls when needed.

5. The director assembles tables using the data supplied. She then writes research reports based on the tables. When appropriate, literature reviews and comparative regional, state, and national data are included.

6. The director provides data analysis, discussion of findings, and conclusions when appropriate.

7. The director forwards draft copies of the reports to all who supply data. The administrators check the data for accuracy and return proofed copies to the research office.

8. The director prepares final drafts of the reports. All appropriate constituents of the college community receive copies of the final reports. Copies are parts of the permanent reference collection of the college library. All data, forms, and proofs are filed for reference.

The first series of research reports concludes with a summary of abstracts that was completed in the spring of Year One and distributed to the administrative staff and all faculty members. The director used the reports to produce the first edition of the college's fact book, also completed in the spring of Year One. Copies of the fact book are available in the institutional research office. They were distributed on campus, are available in the institutional research office, and will be sent to members of the accrediting team at the end of Year Two.

Year Two Activities

In the fall of Year Two all constituents (n = 18) who participated in the institutional research effort or used research results received an evaluation instrument prepared by the director to assess (a) the competence with which each research goal had been addressed and (b) the usefulness of each research report. Fifty-six percent (n = 10) returned the instrument. Goals judged as being addressed competently (i.e., the goals that received a rating of at least 2.4 on a three point scale) include increasing the investment of users in accurate and relevant data, presentation of the data in reports, establishing a depository for

information that supports the reports, production of the fact book, and supporting the self-study. Research reports judged very useful concern analysis of teaching faculty holding the terminal degree, quarterly student enrollment, library holdings, and selected admissions and enrollment information. Ninety percent (n = 9) listed a specific contribution of the research office to their department or area, 80% (n = 8) answered that the research effort influenced their roles as administrators, and 50% (n = 5) suggested improvement for research studies. See Table 1 for results of the evaluation.

Table 1.

Results of the evaluation of Year One institutional research activities
(n = 10)

1. Scale: 3 = addressed competently, 2 = addressed somewhat, 1 = not addressed

Year One Goals	Number of Respondents*	Mean Response
Identify research topics	6	1.9
Method to secure data	6	2.1
Increasing investment of research	7	2.4
Presenting the data	8	2.6
Depository for information	8	2.4
First factbook	8	2.8
Support SACS	8	2.5

2. Scale: 3 = very useful, 2 = somewhat useful, 1 = not useful

Topic of report	Number of Respondents*	Mean Response
Analysis of faculty	10	2.6
Fall student enrollment	9	2.3
Organizational information	9	2.2
Academic support	9	2.2
Summary of library holdings	10	2.5
Winter student enrollment	8	2.4
Student services	9	2.1
Admissions/enrollment information	10	2.3
HERI survey	7	2.0
Spring student enrollment	8	2.4

* Participants did not respond to items of no concern to their areas of responsibility.

Year One success led to more sophisticated Year Two goals (the 1990-1991 academic year). They are:

1. to develop a calendar of institutional research activities.
2. to update some reports and publish new reports in other areas.
3. to increase the analytical nature of reports.
4. to publish a second edition of the fact book.
5. to involve the external community in an economic impact study.
6. to continue to contribute to the reaccreditation process.
7. to evaluate institutional research and the fact book, with particular attention to their influence on decision making.

At this writing Year Two goals are being addressed. Using the same participative procedure to gather data and proof the reports, five updated reports and twelve reports on newly-identified topics have been produced since the beginning of the fall term. One new research topic concerns the economic impact of the college on the community. For this report the director assembled a committee of community leaders to act as advisors.

Another research theme of Year Two concerns assessment of educational outcomes. The college-wide assessment model is in its first year of implementation. Accordingly, the research office has investigated student outcomes in educational programs. Reports address undergraduate students' performance on standardized measure of general skills and knowledge and of certain major fields, and describe graduate and undergraduate students' performance on qualifying tests for graduate school. Other reports address graduate and undergraduate student opinions, admissions and enrollment information, and assessment of student development programs. During Year Two the institutional research office met all self-study deadlines. The reaccrediting committee made no recommendations regarding institutional research. In all aspects of the research process the numerous contributions of the administration, department heads, and academic area directors have been invaluable.

Discussion and Conclusions

It appears that two channels of activity contribute to the proliferation of institutional research activities at the college under discussion. The newly-organized research office offers one channel, but cannot meet the needs of an institution led by a research-oriented academic vice president, undergoing reaccreditation procedures, and instituting an assessment model for the curriculum. Department chairs and academic area directors offer an alternate and supporting channel. Most research needs are met because many constituents supply and/or verify data. In the process they invest in the products of collaborative research. The outcome is a research effort that has moved in two years from a position of engaging in almost no centralized empirical study to one of widespread involvement. As such it is an example of the proliferation of research described by Hearn and Corcoran (1988). When analyzed in terms of the six external or organizational factors that appear to lead to the proliferation, the following seem to contribute to the proliferation of research:

1. External conditions. The impending visit of the accrediting committee is an important and obvious example. Others are declining enrollment in the residential student population and shrinking budgets. Most department chairs have been charged with taking steps to retain the students now enrolled and attract new students to the college. They also seek ways to attract funds to the campus.

2. Personalities and career paths. In the fall of Year One a new academic vice president with a background in institutional research assumed office. Consequently, data requests administrators directors increased. Also, the institutional research office is functioning and professionally-staffed for the first time. The institutional research director returned at the beginning of Year One from a year's leave to complete requirements for a doctorate in higher education, including institutional research coursework. While on leave she conducted research on student outcome at two colleges. She is also active in regional and national research organizations.

3. Management styles. The present administration of the college seems to take an

information-sharing approach to management. When appropriate, decisions seem to be based on empirical information with an interest in national, regional, and local trends. Institutional research is a natural underpinning of this style. Requests for information from management have grown steadily during the two years covered in this study. These requests are met in one of three ways: (a) the information is supplied by the institutional research office, (b) the information is gathered from department heads and academic area directors, then analyzed and reported by the institutional research office, or (c) the information is supplied directly by the department heads and directors without involvement by the research director. All three routes help meet current research needs.

4. Power arrangements. Reaccreditation procedures and the adoption of an outcomes assessment model for the curriculum have resulted in increased interest in and need for data in all academic departments. While the institutional research office is not responsible for collecting data on students outcomes in particular courses, a college-wide dedication to measuring outcomes has enhanced the status of data. For example, administrators and department heads have responded to declining enrollment by asking for frequent and accurate student counts. These are supplied by the research director and the registrar.

5. Microcomputing and telecommunications. No centralized, accessible data base for student information exists at the college under discussion. The use of microcomputers allows information to be accessed from the registrar's office but it is not transferrable to word processing or spreadsheet programs. Therefore the only computing tools available to the institutional research office are microcomputer applications. In this case desktop computers make research possible. Most department chairs also have microcomputers. They can examine data, especially student records, and answer questions on their own.

6. Structural/procedural arrangements. Even on the small campus under discussion, three different academic calendars are in effect. Some departments offer courses according to more than one calendar. Such a configuration makes accurate student counts difficult.

To standardize reporting this research is conducted by the research office and the registrar's office. Two years ago no regular enrollment numbers were published campus-wide. At present, enrollment numbers are reported eight times yearly.

Hearn and Corcoran (1988) observed that the forces determining the nature of the proliferation of research seem to support the organizational contingency argument and follow from the informational legitimacy and limited attention arguments. At the small college under discussion the nature of the proliferation of research seems to support the organizational contingency and limited attention arguments. External factors such as the impending SACS visit and declining enrollment and budgets increased calls for accurate and useable research and analysis. Influencing internal, or organizational, factors include the hiring of a new academic vice president, assigning a trained researcher to institutional research, and adopting a college-wide assessment model. Demand for the products of research are met through the cooperative efforts of the research office *and* administrative, departmental, and academic area offices. Research takes place in offices other than that of institutional research because research office time and resources are not available to meet all significant needs.

A college expected to have a centralized administration might be expected to have a centralized research function. Yet the research effort under discussion can only be described as decentralized and integrated. As such it reflects the advice Haas (1980) and Saupe (1981) offer to institutions of all sizes. Institutional research has the potential of not only supplying information but contributing to the professional development of administrative and academic decision makers by engaging them in a vital management function. Since many "actors" on campus invest in the research process, Haas' (1980) route to acceptance of the research function seems valid. In this case institutional research is truly an extension of the current work of many involved constituents.

Considering the differences noted by Baldridge et al. (1978) in the governance and decision-making components of major universities and liberal arts colleges, it is surprising that all six of Hearn and Corcoran's (1988) factors seem to contribute to the proliferation of research at the small college. Baldridge et al. suggest that a more centralized and administration-influenced governance structure should be found

at the small college than at the university. Yet the proliferation of research at both institutions appears to be fueled by personalities, career paths, and management styles of administrators. The external environment should be more influential at the small college than at the university. Yet Hearn and Corcoran name external conditions as an influence at the university. It should be noted that degrees of influence are not the topic of this study. Baldridge et al. did not rule out centralized administration and external conditions as factors influencing governance at any university. Rather, they found these factors to be more influential at small colleges than at universities. Even so, the similarity of these factors at institutions so different from each other seems remarkable.

Perhaps Hearn and Corcoran's (1988) observation that increased research efforts signal debates over goals and values as well as increased dialogue over substantive issues applies to colleges and universities of all sizes, not just to larger institutions. Today most institutions face questions arising from the same substantive issues, namely declining numbers of applicants and students, shrinking budgets, and externally-imposed requirements to assess educational outcomes. They also seem to engage in debate about similar questions of goals and values. Identification of desirable educational outcomes is one of these. In 1978 Baldridge et al. concluded that methods of decision-making and governance were different because the attributes of institutions were different. Perhaps in the 1990s methods of decision-making and governance are more closely related to questions and issues and less influenced by institutional type.

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